

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q76265

Hiroyuki ASAKO, et al.

Appln. No.: 10/608,533

Group Art Unit: 1645

Confirmation No.: 8267

Examiner: Unknown

Filed: June 30, 2003

For:

MODIFIED REDUCTASE AND ITS GENE

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir: '

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

Serial No.	Applicant's Name	Filing Date
10/608,625	ASAKO et al.	June 30, 2003
10/617,034	ITOH et al.	July 11, 2003

- 1. European Patent Application No. 0 400 239 A1, published December 5, 1990, to Daito Koeki Kabushiki Kaisha.
- 2. European Patent Application No. 0 967 271 A1, published December 29, 1999, to Kaneka Corporation.
- 3. European Patent Application No 1 201 647 A2, published May 2, 2002, to Sumitomo Chemical Co., Ltd.

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- 4. ITOH et al., "Chiral alcohol production by NADH-dependent phenylacetaldehyde reductase coupled with *in situ* regeneration of NADA," *Eur. J. Biochem.* 269, 2002, pp. 2394-2402.
- 5. Japanese Patent Application No. 02-312593, published December 27, 1990, to Daito Corp., with English Abstract.
- 6. Japanese Patent Application No. 2001-294549, published October 23, 2001, to Pfizer Prod. Inc., with English Abstract.
- 7. Japanese Patent No. 2532299, issued June 27, 1996, to Fuji Rebio Inc., with English Abstract.
- 8. NAKAMURA et al., "Recent developments in asymmetric reduction of ketones with biocatalysts", *Tetrahedron: Asymmetry Report Number 60, Tetrahedron: asymmetry*, 14, (2003), PP. 2659-2681.
- 9. SPILIOTIS et al., "Enhanced Optical Purity of 3-Hydroxyesters Obtained by Baker's Yeast Reduction of 3-Ketoesters", *Tetrahedron Letters*, Vol. 31, No. 11, 1990, pp. 1615-1616.
- 10. U.S. Patent Application Publication No. 2003/0186400 A1, published October 2, 2003, to Asako et al.
- 11. U.S. Patent No. 4,455,373, issued June 19, 1984, to Higgins.
- 12. U.S. Patent No. 5,215,919, issued June 1, 1993, to Miya et al.
- 13. U.S. Patent No. 5,233,095, issued August 3, 1993, to Fellmann et al.
- 14. WEI et al., "Baker's yeast mediated mono-reduction of 1,3-cyclohexanediones bearing two identical C(2) substituents", *Tetrahedron: Asymmetry*, Vol. 12, 2001, pages 229-233.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

ASAKO et al.

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Appln. No. 10/608,533

INFORMATION DISCLOSURE STATEMENT

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Registration No. 32,607

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

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CUSTOMER NUMBER

Date: February 26, 2004

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Substitute for Form 1449 A & B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICATION

(use as many sheets as necessary)

Sheet 1 of 1

Сотр	lete if Known	
Application Number	10/608,533	
Confirmation Number	8267	
Filing Date	June 30, 2003	
First Named Inventor	Hiroyuki ASAKO	
Art Unit	1645	
Examiner Name	Unknown	
Attorney Docket Number	Q76265	٦

U.S. PATENT DOCUMENTS					
Examiner Cite Initials* No.	Cito	Document N	umber	Publication Date MM-DD-YYYY	
	No.1	Number	Kind Code ² (if known)		Name of Patentee or Applicant of Cited Documen
		US 2003/0186400	A1	10-02-2003	Asako et al.
		US 4,455,373	Α	06-19-1984	Higgins
		US 5,215,919	A	06-01-1993	Miya et al.
		US 5,233,095	Α	08-03-1993	Fellmann et al.
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Cite Initials* No.1	Foreign Patent Document			Publication Date	Name of Patentee or	m 6	
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶
		EP	0 400 239	Al	12-05-1990	Daito Koeki Kabushiki Kaisha	
		EP	0 967 271	A1	12-29-1999	Kaneka Corporation	
	***	EP	1 201 647	A2	05-02-2002	Sumitomo Chemical Co.	
	No.	JP	02-312593	Α	12-27-1990	Daito Corp.	Abstract
		JP	2001-294549	Α	10-23-2001	Pfizer Prod. Inc.	Abstract
	· · · ·	JP	2532299	B2	06-27-1996	Fuji Rebio Inc.	Abstract
				 			
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		U.S. Patent Application No. 10/608,625 to ASAKO et al., filed June 30, 2003	
		U.S. Patent Application No. 10/617,034 to ITOH et al., filed July 11, 2003	
		ITOH et al., "Chiral alcohol production by NADH-dependent phenylacetaldehyde reductase coupled with in situ regeneration of NADA," Eur. J. Biochem. 269, 2002, pp. 2394-2402	
		NAKAMURA et al., "Recent developments in asymmetric reduction of ketones with biocatalysts", Tetrahedron: Asymmetry Report Number 60, Tetrahedron: asymmetry, 14, (2003), PP. 2659-2681	
		SPILIOTIS et al., "Enhanced Optical Purity of 3-Hydroxyesters Obtained by Baker's Yeast Reduction of 3-Ketoesters", <i>Tetrahedron Letters</i> , Vol. 31, No. 11, 1990, pp. 1615-1616	
		WEI et al., "Baker's yeast mediated mono-reduction of 1,3-cyclohexanediones bearing two identical C(2) substituents", <i>Tetrahedron: Asymmetry</i> , Vol. 12, 2001, pages 229-233	

Examiner Signature	 Date Cons	sidered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.